

WHAT IS CLAIMED IS:

1. A printing apparatus which performs printing by using a printhead having a printing element for performing printing on a target printing medium,

5 comprising:

command generation means for outputting a command for causing the printhead to perform predetermined processing;

a carriage which supports the printhead and scans  
10 the printhead on the target printing medium; and

control means, arranged on the said carriage, for receiving the command generated by said command generation means and outputting a control signal corresponding to the command to the printhead, thereby  
15 controlling the printhead.

2. The apparatus according to claim 1, wherein the printhead comprises storage means for storing feature information,

said command generation means outputs a command  
20 for acquiring specific information from information held by the printhead, and

said control means receives the command generated by said command generation means, accesses the storage means of the printhead, and acquires specific  
25 information corresponding to the command from the storage means.

3. The apparatus according to claim 2, wherein said

control means comprises

conversion means for converting the command  
generated by said command generation means into an  
access signal containing an address for reading out  
5 information specified by the command from the storage  
means, and

acquisition means for accessing the storage means  
in response to the access signal obtained by the  
conversion means, and acquiring the specific  
10 information.

4. The apparatus according to claim 3, wherein the  
conversion means has, in correspondence with each of a  
plurality of types of printheads, a table which makes  
the information specified by the command and a storage  
15 address correspond to each other, and generates the  
access signal by looking up a table corresponding to a  
mounted printhead.

5. The apparatus according to claim 1, wherein the  
command generated by said command generation means  
20 includes a command for driving and controlling the  
printhead.

6. The apparatus according to claim 1, wherein said  
command generation means is arranged in said carriage,  
interprets an input sequence instruction, generates a  
25 command for causing the printhead to perform  
predetermined processing, and outputs the command to  
the printhead.

7. The apparatus according to claim 6, wherein said command generation means generates a second command on the basis of a result acquired from the printhead in accordance with a first command, and outputs the second  
5 command to the printhead.

8. The apparatus according to claim 1, wherein the printing element has a heating element, and performs printing by discharging ink from an orifice arranged in correspondence with the heating element.

10 9. A printhead having a plurality of printing elements for performing printing, comprising:

reception means for receiving a command for causing the printhead to perform predetermined processing;

15 generation means for generating a control signal corresponding to the command received by said reception means; and

control means for performing control in accordance with the control signal generated by said  
20 generation means.

10. The printhead according to claim 9, wherein the printhead further comprises storage means for storing feature information, and

said control means acquires specific information  
25 from said storage means in accordance with the command, and externally outputs the specific information.

11. The printhead according to claim 10, wherein

said generation means comprises conversion means for converting the command received by said reception means into an access signal containing an address for reading out information specified by the command from  
5 said storage means, and

said control means accesses said storage means in response to the access signal obtained by the conversion means, and acquires corresponding specific information.

10 12. The printhead according to claim 11, wherein the conversion means has a table which makes the information specified by the command and a storage address in said storage means correspond to each other, and generates the access signal by looking up the  
15 table.

13. The printhead according to claim 9, wherein said generation means generates a control signal for driving and controlling the printhead on the basis of the command received by said reception means.

20 14. The printhead according to claim 13, wherein said generation means generates a second command on the basis of a result of executing processing by said control means in accordance with a generated first command, and outputs the second command to said control  
25 means.

15. The printhead according to claim 9, wherein a heating element is used as the printing element, and

printing is performed by discharging ink from an orifice arranged in correspondence with the heating element.

16. An element base for a printhead having a plurality of printing elements for performing printing and a driving control circuit for selectively driving the plurality of printing elements, comprising:

reception means for receiving an externally input command; and

- control means for performing control corresponding to the command received by said reception means.

17. A method of controlling a printing apparatus including a printhead having a printing element for performing printing and storage means for storing feature information, a first control unit which controls the printing apparatus, and a second control unit which is mounted on a cartridge for carrying the printhead or arranged in the printhead, and can operate independently of the first control unit, said method comprising:

a command generation step of causing the first control unit to generate a command for acquiring specific information from information held by the printhead; and

a control step of causing the second control unit to receive the command generated in the command

generation step, access the storage means of the printhead, and acquire the specific information corresponding to the command from the storage means.

18. The method according to claim 17, wherein the  
5 second control means is arranged on an element base for the printhead having the printing element for performing printing in the printhead and the storage means for storing feature information.

19. A liquid discharge apparatus which discharges a  
10 liquid by using a liquid discharge head having a liquid discharge element for discharging a liquid, comprising:

command generation means for outputting a command for causing the liquid discharge head to perform predetermined processing;

15 head mounting means for mounting the liquid discharge head; and

control means, arranged on the said head mounting means, for receiving the command generated by said command generation means and outputting a control  
20 signal corresponding to the command, thereby controlling the liquid discharge head.

20. A liquid discharge head having a liquid discharge element for discharging a liquid, comprising:

reception means for receiving a command for  
25 causing the liquid discharge head to perform predetermined processing;

generation means for generating a control signal

corresponding to the command received by said reception means; and

control means for performing control  
corresponding to the control signal generated by said  
5 generation means.

21. An element base for a liquid discharge head  
having a plurality of liquid discharge elements for  
discharging a liquid and a driving control circuit for  
selectively driving the plurality of liquid discharge  
10 elements, comprising:

reception means for receiving an externally input  
command; and

control means for performing control  
corresponding to the command received by said reception  
15 means.